

REMARKS

The Office Action of April 16, 2003 presents the examination of claims 1-6. The present paper amends claim 1, cancels claims 2 and 5-6, and adds claims 7-9.

Support for the new claims

New claim 7 recites that the golf ball has a solid core. Such a recitation is supported by the specification at page 11, lines 19 ff.

The recitations in claim 8 are those of original claim 3 and find support at pages 8-10 of the specification.

The recitations in claim 9 are those of original claim 4 and are supported by the specification at page 11, lines 12-14.

Rejection over Wu '002

Claims 1, 3 and 4 are rejected under 35 U.S.C. § 102(e) as anticipated by, or under 35 U.S.C. § 103(a) as unpatentable over Wu '002. Claim 1 as amended incorporates the recitations of claim 2, thereby obviating the instant rejection.

Rejection over Kakiuchi

Claims 1-3, 4 and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by, or under 35 U.S.C. § 103(a) as being

unpatentable over, Kakiuchi '286. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

In particular, the Examiner does not show explicit teachings in the Kakiuchi patent of each limitation recited in the rejected claims. Rather, the Examiner presumes identity of the products, "Kakiuchi does not indicate the high MW polyol and diisocyanate are pre-reacted, but there is no reason to believe the final product is any different from applicant's final product." However, the Examiner is incorrect in believing that the difference in processing steps does not lead to a different result.

Kakiuchi discloses only a golf ball having a thermoplastic polyurethane cover (e.g. col. 2, line 41). In general, a thermoplastic polyurethane cover will be superior to a thermosetting polyurethane cover as is used in the present invention, in the characteristic of moldability of the cover. On the other hand, a thermoplastic cover is inferior to a thermosetting cover with respect to mechanical properties.

The differences in the properties of the two kinds of covers arise from the different chemical properties of the cover materials. The thermoplastic material has a linear polymeric structure, while the thermosetting material has a three-dimensional, cross-linked polymeric structure. The present golf

ball utilizes a thermosetting (see e.g., page 16, last two lines), cross-linked type material (see e.g. page 8, lines 10-15).

Thus, the golf ball of the instant invention, being one having a cross-linked polymeric cover, is distinct from the golf ball disclosed by Kakiuchi. Furthermore, Kakiuchi does not make any suggestion to modify the cover of a golf ball by use of a thermosetting polymer, rather than a thermoplastic polymer, to form the cover. Accordingly, the present invention is neither anticipated by, nor obvious in view of, Kakiuchi and the instant rejection should be withdrawn.

Rejection over Kakiuchi in view of Peter

Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kakiuchi '286 in view of Peter '313. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

The Examiner asserts that it would be obvious to one of ordinary skill in the art to apply a process of pre-reacting a high molecular weight polyol with diisocyanate according to Peter rather than concurrent reaction.

Applicant submits that the Examiner fails to establish *prima facie* obviousness of the claimed invention. In particular, the

references cannot be combined in the manner suggested by the Examiner.

Peter discloses a prepolymer manufacturing method using a specific polyol that is selected from the group consisting of homopolymers of ethylene oxide (EO), homopolymers of propylene oxide (PO) and copolymers of EO and PO. These polymers provide lower cost and lower viscosity than polytetramethylene ether glycol polymers (PTMEG) or polyester or polycaprolactone polymers. (See, col. 6, lines 56-60 and col. 8, lines 10-11.) Thus, Peter excludes from his process polymers having high cost and high viscosity.

It is well-known in the art that polycarbonate polyols, as used in the present invention, are more expensive and much higher in viscosity than even PTMEG, and thus more so than EO, PO and EO/PO copolymers. Thus, as Peter excludes use of expensive, high viscosity polymers from his prepolymer process, the combination of Kakiuchi with Peter is inconsistent and cannot be asserted to establish *prima facie* obviousness of the present invention. Accordingly, the instant rejection should be withdrawn.

Rejections over Cavallaro or Cavallaro in view of Murai

Claims 1-6 are rejected under 102(a) as anticipated by, or under 35 U.S.C. § 103(a) as unpatentable over, Cavallaro '491. Claims 1-6 also stand rejected under 35 U.S.C. § 103(a) as

unpatentable over Cavallaro in view of Murai '691. These rejections are respectfully traversed. Reconsideration and withdrawal thereof are requested.

Applicant provides attached hereto a Declaration under 37 CFR 1.131 of Ms. Eriko Kamitani. Ms. Kamitami's Declaration establishes that the present invention was conceived before the filing date of the Cavallaro publication reference and that a patent application that serves as a constructive reduction to practice of the invention now claimed was diligently prepared in the time between the date before Cavallaro's filing date and the filing date of the present application.

Ms. Kamitami's Declaration is sufficient to antedate the Cavallaro publication and so it cannot be applied as prior art. Thus, all of the rejections based wholly or partly upon the Cavallaro publication reference must be withdrawn.

Patentability of claims 7-9

In passing, Applicant would note that claims 7-9 are patentable over the Kakiuchi reference. Claims 7-9 recite a golf ball having a solid structure. On the other hand, Kakiuchi describes a ball having a wound core. Thus, claims 7-9 are distinct from what is disclosed by Kakiuchi.

Conclusion

The present application well-describes and claims patentable subject matter. The favorable action of allowance of the pending claims and passage of the application to issue is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell (Reg. No. 36,623) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a two (2) month extension of time for filing a response in connection with the present application. The required fee of \$410.00 is attached hereto.

Appl. No. 10/085,078

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s): Declaration under 37 C.F.R. § 1.131 and Exhibits 1-10